

REMARKS

Claims 1-9 are pending in the present application. Claims 1-8 have been examined and claim 9 has been withdrawn from consideration.

Restriction

Applicants affirm the election, with traverse, of Group I, claims 1-8. Claim 9 is withdrawn from consideration.

The Examiner alleges that there is no unity of invention and asserts that Kanda (JP 2001326434) and Kishi (JP 2002338664) teach the present invention such that the present claims do not recite a special technical feature which amounts to a contribution to the art. As set forth in detail below, Applicants believe that the present invention contains a contribution over the art (including the teachings of Kanda and Kishi). As such, rejoinder of claim 9 with claims 1-8 is respectfully requested at this time.

Rejection Under 35 USC § 103

Claims 1-8 have been rejected under 35 USC § 103(a) as being unpatentable over Kanda (JP 2001326434) and Kishi (JP 2002338664). This rejection is respectfully traversed. Reconsideration and withdrawal thereof are requested.

Applicants' Invention

The present invention is directed to a laminated body of a molded product which has a plating layer formed on its surface and which is obtained by bulk polymerization of a cyclic olefin monomer in the presence of an inorganic filler and in the presence of a ruthenium catalyst. The Applicants have discovered that when a ruthenium catalyst is used in the presence of an inorganic filler in the bulk polymerization process, the following advantages are observed:

1. The resulting molded product exhibits improved adhesion to the plating layer;
2. The deterioration in catalytic activity is minimized; and
3. A higher heat-tolerance of the molded product results.

When a metathesis catalyst is used to produce an injection-molded product by bulk polymerization of polymerizable monomers, the presence of an inorganic filler often decreases the activity of the catalyst to the point that the production of the desired molded product is impossible. Thus, Applicants have found that the selection of an appropriate filler to be used must necessarily take into consideration the type of catalyst present in the system.

Kanda et al.

Kanda is directed to a method for producing insulating substrates for printed circuit boards by subjecting a stock solution containing a norbornene monomer and a metathesis polymerization catalyst (such as a ruthenium catalyst) to bulk polymerization. Kanda does not teach the use of an inorganic filler as described in Applicants claims.

Kishi et al.

Kishi is directed to a method for producing a norbornene resin molding by subjecting a norbornene monomer to bulk polymerization in the presence of a filler and a metathesis catalyst. Kishi's use of a filler in the polymerization process is cited to correct this same deficiency in Kanda.

However, Kishi describes both organic and inorganic fillers for use in the polymerization process for producing norbornene (paragraph [0023]) and does not recognize or appreciate the advantages offered from the use of an inorganic filler. Nor does Kishi appreciate the importance of choosing the appropriate filler relative to the catalyst used. According to Kishi, the filler is used "for the purpose of improvement in mechanical properties, such as contraction of the norbornene system resin-molding object acquired, and an elastic modulus, coloring, flameproofing, rigid grant, low-thermal-expansionizing, increase in quantity, a weight saving, electric conduction grant, or the prevention from electrification." (Paragraph [0023]). By contrast, in the present invention the inorganic filler is added in order to improve the adhesion between a molded product and a plating layer. This advantage is not recognized by Kishi since Kishi is not concerned with the adhesion of a plating layer to a molded product.

As Applicants have noted above, the arbitrary selection of metathesis catalysts and fillers to be used in a polymerization reaction can lead to very undesirable end products or no product at all. Therefore, the failure of Kishi to recognize this limitation would force the skilled artisan

to randomly select among the dozens of organic and inorganic fillers disclosed in Kishi, one filler to use in the polymerization reaction of Kanda.

Accordingly, in the absence of any guidance by either Kanda or Kishi as to what type of filler would be desirable to use with the catalyst of Kanda in order to achieve the unexpectedly advantageous results obtained by Applicants, a *prima facie* case of obviousness has not been established.

Moreover, since the insulating substrate of Kanda is used in a printed circuit board, Kanda discloses that its dielectric constant generally needs to be 3 or lower (paragraph [0034]). One of ordinary skill in the art would readily recognize that the addition of an inorganic filler, as described in Kishi, to this insulating substrate would raise the dielectric constant to a value above 3 and thus destroy the intended use of the insulating substrate.

As stated in MPEP 2143.01(V):

If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

And MPEP 2143.01(VI):

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

Accordingly, one of ordinary skill in the art would not be motivated to use the fillers of Kishi in the process of Kanda with any reasonable expectation of success since the combination of the teachings of these references would destroy the intended purpose of Kanda.

Inasmuch as Kanda fails to teach a laminated body of a molded product which has a plating layer formed on its surface and which is obtained by bulk polymerization of a cyclic olefin monomer in the presence of an inorganic filler and in the presence of a ruthenium catalyst according to the present invention, and since the combination of Kanda with Kishi does not overcome the deficiencies of Kanda, a *prima facie* case of obviousness has not been established. Applicants respectfully request that the rejection over these references be withdrawn.

December 27, 2005 IDS

Applicants note that an IDS was timely filed on December 27, 2005. However, the Examiner has not returned a signed copy of the PTO SB08 form. The Examiner is respectfully requested to return a signed copy of the form so as to make the record clear that the Examiner has considered the documents cited therein. It is noted that the IDS and the cited documents are available for the Examiner's review in PAIR.

Conclusion

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Marc S. Weiner Reg. No. 32,181 at

Application No. 10/562,395
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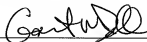
Docket No.: 4670-0115PUS1

the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Dated: January 8, 2009

Respectfully submitted,

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